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Wildlife

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Virginia's Wildlife and Related Natural Resources
and to the Betterment of
Outdoor Recreation in Virginia*

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SEPTEMBER

Volume XXVI/No. 9

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COVER: Preferring cool, swiftly flowing waters to lakes and ponds, the smallmouth bass is outdone by no other freshwater species in furnishing fishing sport and thrills. Why does he jump? Perhaps to seize an insect hovering above his watery domain; or perhaps out of sheer autumn exuberance. Our artist: Duane Raver.

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EDITORIAL

Autumn Delight

LABOR Day marks the traditional end of the summer season. The equinox officially ushers autumn in. The heat of summer may linger a while, as though disinclined to leave, but the turn of the year is at hand and on a fine September morn the air will bear a cool, exhilarating fragrance, born of the silent evergreen forests of the far north, pushing down over the land as sultry cyclonic air masses fall back upon their tropical ocean bases. A season to uplift the spirit and delight the senses is hard upon us.

September is the ripening, the maturity, the fulfillment of every promise which was in spring's urgent sprouting and summer's luxuriant growth. Fish shake off their dog days lethargy and go on feeding sprees that last until the chill of winter slows them down. Great flights of doves sweep over fields of grain. Salt marshes turn from green to brown, and clapper rails rise above them when the tide is in. Migrant birds funnel down ancestral flyways, along wooded ridges and fertile valleys, ever southward. Squirrels perform their aerialistic acrobatics in the tops of the tallest trees, as they find another nut crop sweet and ready for harvest. Before first frost a blaze of autumn color decks the countryside as the land's most festive raiment, washed in equinoctial rain, is spread to dry under Indian summer's gentle sun.

A time of growing quiet is upon the land, when the great urgencies of life are subdued. The chorus of birdsong is muted. The strident voices of the katydid by night and the cicada by day are stilled. It is a time of summing up, a time for contemplation, a time to feel delight. It should be a time of peace on earth; a time for contentment of body and of soul.

Even as man fixes his eyes upon the heavens and sets himself new goals of exploration out among the stars, he is faced with the challenge of developing among the inhabitants of the earth a deep concern for the future of this planet. Delight in the things of the earth is the very cornerstone of concern for the earth's condition, for its habitability, and for the quality of human life it will support. Each individual must acquire his own regard and sense of stewardship for the earth that sustains him. Each individual needs the opportunity to experience his own delight.

This is the challenge of the times: that all men may look upon and feel the beauty and goodness of the earth and the great continuities of life with simple, childlike wonder and delight. It is a challenge that somehow does not seem too hard to meet, in September.—J.F.Mc.

LETTERS

Illegal Bumper Hitch?

IN your July 1965 issue of *Virginia Wildlife*, vol. XXVI/No. 7, you have an article entitled "Outfit Your Boat for Fun and Safety" by one Jim Rutherford, pp. 16-19. Please note the trailer hitch on page 19; it is not going to contribute to either his fun or his safety because it obscures his license plate. I'm sure many troopers who read your fine magazine are looking for Mr. Rutherford and his bumper hitch now.

William Bernard
Arlington

NOW that Mr. Jim Rutherford has his boat "Outfitted for Fun and Safety" his next move should be to install a trailer hitch that meets the approval of the State Police. The one pictured in this article is illegal inasmuch as it covers the license.

Thanks for a great magazine.

Kenneth R. Mears
Parksley

Jim Rutherford's bumper hitch that obscures his license plate is legal only when he actually has a trailer in tow and must be removed whenever his trailer is unhitched.—Ed.

Free Dogs Destroy Wildlife

OVER the years I have heard demands made for restocking game in our state. Organizations have been formed and dues paid for that purpose. Other groups have been badly split and some dissolved because of divergent opinions on the subject. In spite of all their interest in restocking, these same "sportsmen" continue to allow "Old Rover" to roam at large during the spring and summer months.

Here in my neighborhood, I can cite 5 deer being killed by dogs this spring. Not wild or stray dogs but dogs wearing collars and tags. Two doe and their fawns have fallen prey to dogs and a fawn was caught and killed this past week while a "sportsman" watched the chase. (The dogs didn't belong to him.) One of the doe killed was set upon while giving birth to her fawn.

Maybe through your magazine, even at the risk of seeming repetitious, you could stir up enough interest among true sportsmen so that some effective action might be initiated to curb such wanton waste of our game supply. I would suggest a mandatory confinement period for all dogs at least from April 1st through July since this is "hatching time" for all our game species.

John H. Byrne, Jr.
Lowry

Offers Complete Virginia Wildlife Volumes

I HAVE valued every copy of *Virginia Wildlife* so that I have saved every one from the first of my subscription, December 1952.

Now I had better dispose of them. I wonder if you or anyone else would care for the complete set? It would not be sensible for me to send out one or two to complete someone's file. But if anyone cares for all of them enough to pay the express C.O.D. they are welcome.

Frank S. Harwood
29 St. Peter Place, Keyport, N. J. 07735

SHOOTING AT DOVES

By W. ALAN GUTHRIE
District Game Biologist



As autumn approaches, the sportsman's mind begins to wander from his routine daily chores and the business of making a living. His spirit is afflicted with a restlessness which urges him to take an afternoon off, pick up his hunting paraphernalia, get out in the country and seek once again the satisfying excitement of the hunt.

The descriptive word *exciting* perhaps applies more precisely to dove hunting than to most other outdoor sports. Let's visualize a typical scene.

Corn picking has been completed and there is an abundance of shattered corn on the ground. Around the periphery of the field strange figures crouch at fairly frequent intervals, behind flimsy makeshift blinds, pine trees, and other bushes. Lo! these figures are men! They are dove hunters, dressed in camouflage suits or other foliage colored clothing to help obscure them from the sharp eyes of the doves.

Early in the afternoon the doves begin flying into the field to feed. Someone may yell, "Coming in behind you, Bill!" Bill swings around, waits for the precise moment to discharge his load of small shot, and then fires. Once, twice, and finally a third time the gun speaks; yet the dove continues zigzagging wildly across the field. Bill exclaims, "Looks as if I'm picking up exactly where I left off last season!" A nearby hunter shouts humorous advice, and wild laughter erupts about the field. As the laughter is subsiding, half a dozen more "gray ghosts" streak by unseen until out of range.

Before the day is over, every hunter will have remarked, "This gun is sure fouled up today." Or, "Guess I'd better have my glasses changed. Seems like my eyes *have* been bothering me lately." Or, "How *do* those sneaky birds manage to fly through that shot? I was right on him!" Similar remarks may be heard throughout the afternoon. But after a few hours, when the hunters have punched hundreds of holes in the air with their scatterguns, most everyone will have killed a few birds. And each of these happy sportsmen will have enjoyed another exciting afternoon. They will no doubt return to try their luck again, and to prove to their companions and themselves that they really can shoot fairly well, but were just a little "off" today.

Yes, dove shooting is exciting. It is a sport which can be enjoyed by the young and old, male and female, by almost everyone, from every walk of life.

There is practically an unlimited opportunity to get in some dove shooting, for everyone who wants to. Most of the state of Virginia will have at least a few of these migratory birds, but in some sections the abundance is naturally much greater than in others. Corn fields which have been re-

cently picked are always fairly good bets. The Commission of Game and Inland Fisheries has established a number of experimental dove shooting fields on various public hunting areas. These consist of plantations of brown-top millet, and occasionally a small percentage of other seed producing plants. Generally they have been quite successful. Such areas as the Kerr Reservoir Management Area, the Elm Hill Management Area, the Powhatan Management Area, Camp Pickett, Camp A. P. Hill, and Quantico have dove fields. Although they have produced varying degrees of success, all fields yield many hours of fine recreation for area sportsmen, and, in the long run, this is our goal.

Doves are fond of corn, millet, cowpeas, ragweed, and, in fact, they may be seen feeding on almost any weeds or grains. Therefore, it is a fairly simple matter to locate a small concentration of doves in practically any section of the state.

Shooting too frequently over a particular field is quite apt to drive the birds from the area. Shooting twice a week is as often as is recommended, and perhaps only once every week or ten days would be even better.

Doves are hard to hit, and frequent missing is as much a part of the excitement as is the hitting. But we know that many of the doves which we think we missed fly off to die of their wounds, and are lost to us. It is all too easy to become impatient in the field, to take shots which are too long. If we will "pick our shots," and be sure the birds are within range, then our shooting percentage will climb, and fewer cripples escape.

The mourning dove is one of our most sporty game birds. It can, and does, supply a great deal of the outdoor recreation which the public demands and needs. It is up to personnel who are professionally trained in management work to attempt to maintain our populations of doves by proper and adequate regulations. But, in the final analysis, it is up to you, Mr. Sportsman, to obey the laws, use good judgment in shooting particular areas, and to show a personal interest in keeping this "gray, zigzagging streak of lightning" with us in huntable numbers for generations to come.

May your dove shooting experiences this season be so exciting that you can recall and relate them often in years to come. And when you miss a few shots this year, control your temper and your tongue, and don't be too hasty in criticizing your firearm. Perhaps the trouble lies just behind the weapon!



HUNTING LINEUP

By HARRY L. GILLAM
Information Officer

A SLATE of hunting seasons not greatly different from those enjoyed last year awaits Virginia nimrods this fall. The 2-week, early small game season in western counties and the 2-week western deer season went over well last year and were retained. The special sika deer season on Assateague Island also proved quite popular and was expanded to include a 3-day, archery-only season, October 7-9, in addition to the shotgun and bow and arrow season, October 18-23.

A split dove season beginning September 11 and ending October 30, then opening December 20 and extending through January 8, was selected for Virginia sportsmen this fall. Shooting is limited to the hours between noon and sunset and the bag limits will be the same as those in effect last year. 12 birds daily and 24 in possession.

A 70-day season on rails and gallinules begins September 9 and extends through November 17. A bag of 15 clapper rails, sora rails and gallinules counted together is allowed each day with 30 of such mixed bag allowed in possession. The season opens the day before the full moon and its accompanying high tides.

Snipe and woodcock season will open November 15 and close January 3. Five woodcock are allowed in the daily bag with a possession limit of 10 and snipe hunters will be permitted to take 8 snipe and have 16 in possession.

Shooting hours for all migratory species except doves are from sunrise until sunset, standard time, each day.

The deer season west of the Blue Ridge and in Amherst County west of Route 29, Bedford, Campbell west of Route 29, Franklin, Greene west of Route 29, Halifax, Henry, Madison west of Route 29, Nelson west of Route 151, Patrick and Pittsylvania Counties is November 15-27. The bag limit will be 1 deer per license year, either sex on the first day only with the exception of Montgomery County where bucks only may be taken.

1965-1966 VIRGINIA

MIGRATORY GAME BIRD

HUNTING SEASONS, HUNTING HOURS AND BAG LIMITS

CLAPPER RAIL AND GALLINULES; SORA RAILS



Season: September 9-November 17.

Hours: Sunrise until sunset, standard time each day.

Bag Limits: A total of 15 clapper rails, sora rails and gallinules counted together a day, 30 in possession.

DOVES:



Seasons: September 11-October 30.

December 20-January 8.

Hours: From 12 o'clock noon standard time until sunset each day.

Bag Limit: 12 a day, 24 in possession.

WOODCOCK:



Season: November 15-January 3.

Hours: Sunrise to sunset each day.

Bag Limit: 5 a day, 10 in possession.

JACKSNIPES (Wilson's Snipe):

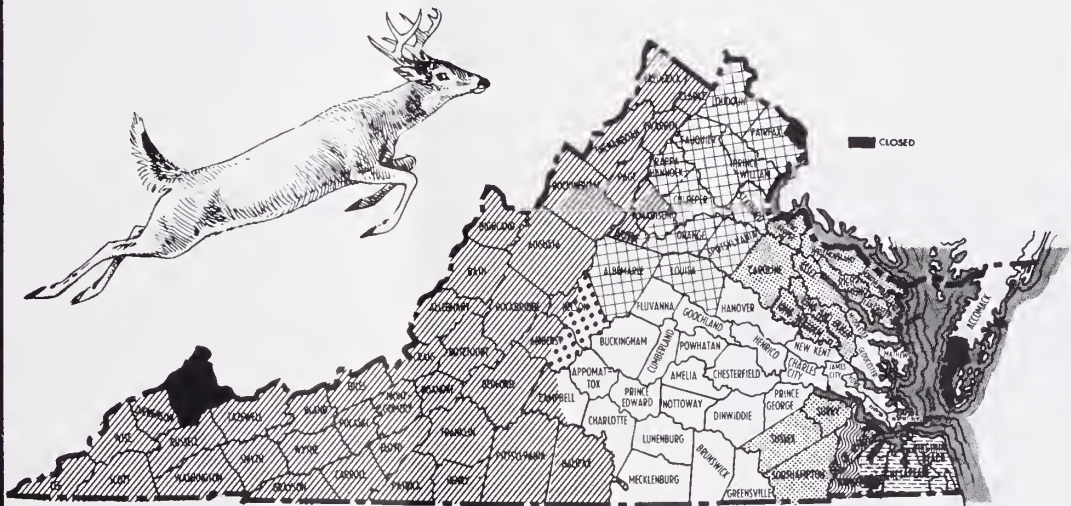


Season: November 15-January 3.

Hours: Sunrise to sunset each day.

Bag Limit: 8 a day, 16 in possession.

1965-66 Deer Seasons and Limits



November 15-27—One deer* per license year, either sex on the first day only (bucks only in Montgomery).



November 15-January 5—One deer* per license year, either sex on the first day only.



November 10-January 5—Two deer* per license year, one of which may be antlerless.



October 1-November 30—Two deer* per license year, one of which may be antlerless.



November 15-January 5—Two deer* per license year, either sex on last 5 hunting days only.



November 15-January 5—Two deer* per license year, bucks only.



November 15-January 5—Two deer* per license year, one of which may be antlerless.

* Bucks with antlers visible above the hair except as otherwise specified.

NO MORE THAN ONE DEER MAY BE TAKEN IN ANY ONE DAY.

WHERE THE CHANNEL BASS IS KING

ONLY the confines of a steady job and the obligations of a family keep me from spending the entire month of October on Smith Island, one of the Eastern Shore's Barrier Islands, where the golden channel bass come frequently and big. If I had my "druthers" I'd spend the entire 31 days of the tenth month there, away from the hustle, bustle and sometimes unreal life of a supposedly civilized world. For on Smith Island peace reigns supreme and the channel bass proves he is the unquestionable king of the southern surf.

I got my first look at this barren, sandy stretch of Atlantic Ocean waterfront when, as a small child, I was one of a group of Eastern Shore natives attending a picnic there. In the fall of 1963 I returned again. This time my thoughts were not of food and frolicking but of what I considered the best chance to catch a big channel bass I had ever confronted. Others in the party included Jim Mays, then outdoor editor of *The Virginian-Pilot*; Mike Williams, the paper's chief photographer in Portsmouth; and our host and guide, Claude Rogers, director of the highly successful Virginia Salt Water Fishing Tournament.

We launched Claude's outboard boat at the little Eastern Shore fishing community of Oyster, about 10 miles north and east of the Chesapeake Bay Bridge Tunnel's northern end. Rogers pushed the throttle of the 90 horsepower motor down hard and headed due east toward the glistening white Coast Guard Station on Cobb Island.

Minutes later we broke into open ocean water through Sand Shoal Inlet, turned south and sped parallel to the shoreline past Wreck, Ship Shoal and Myrtle Islands to Little Inlet, a seldom used entrance to South Bay. The bay separates Mockhorn Island and the Eastern Shore mainland from the Barrier Islands.

Claude threaded the 18-foot boat through narrow channels which took us right to the back side of Smith Island. From there it was just a short walk of perhaps 100 yards over to the gently crashing surf. "This is it, boys," he told us as we dropped our bait bags on the sand. "This is where we're going to find channel bass."

How right he was. Anxiously I took a whole spot from the bag, sliced it diagonally under the dorsal fin and stuck a 9/0 hook through the underside of the lip. We were all using stiff surf rods and conventional reels loaded with 30- and 36-pound test line. The rods measured from 10 to 11 feet long and had the backbone necessary to cast the bait and a four-ounce sinker to a shoaling bar about 60 yards offshore.

I was the first in the water with the bait, followed in order by Mike, Jim and finally Claude. Between the bar and the shoreline was a slough (gully) of deeper water. The tide was

By ROBERT P. HUTCHINSON
Outdoor Editor
Norfolk Virginian-Pilot



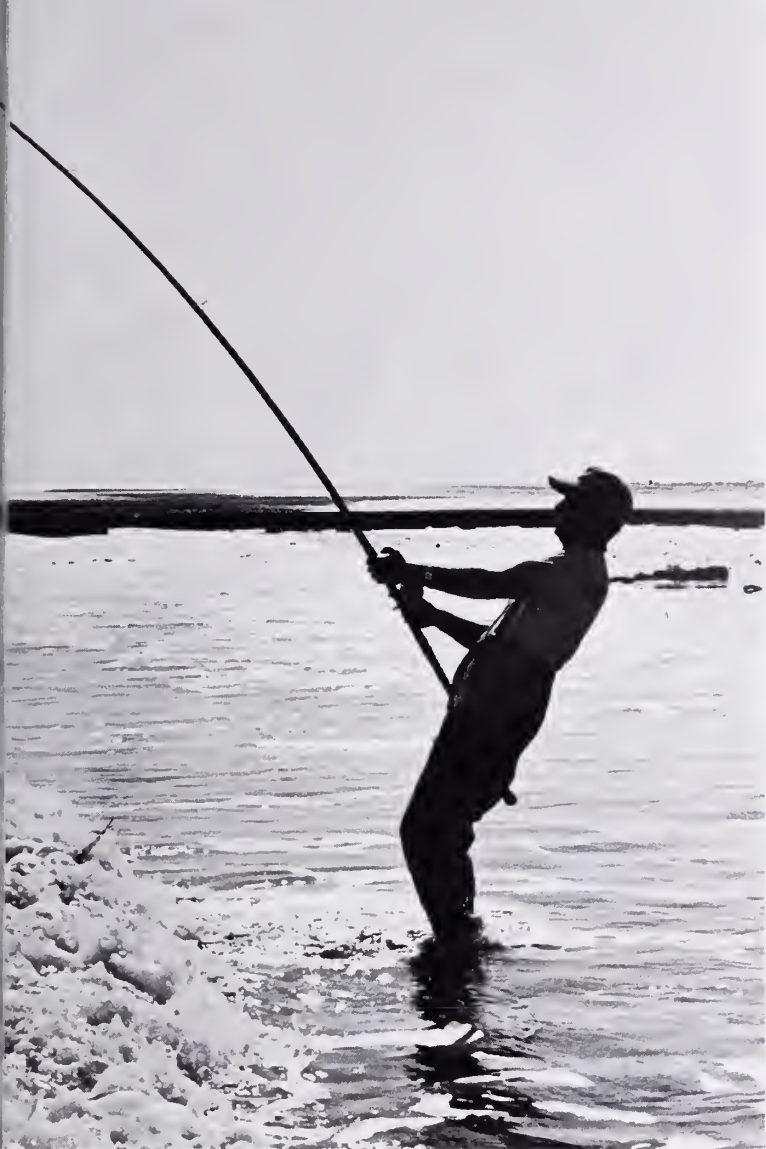
falling and water was running out of the slough's entrance. Baitfish, we hoped, were being tumbled out of the slough, too. With luck there would be at least one bronzed red drum waiting for his dinner at that entrance.

Not being an unusually good caster, a highly desirable quality when fishing these Barrier Islands, I was proud when my bait fell into the water right at the mouth of the slough. I let it lie there and turned to watch as my three companions completed their chores and moved into position alongside me on the beach.

Action wasn't long in coming. I felt a gentle pulling on the bait as a drum picked it up and started moving off. I eased down on the rod tip, allowing him to get it firmly in his mouth. When I was hopefully confident the moment of truth had arrived I leaned back heavily on the rod, driving the hook home and sending the hurting fish bulldogging for the open ocean. Later he weighed in at 41½ pounds.

Before the day ended Mike and Jim also connected with channel bass out of the same hole. On the way back into Oyster we decided to stop off at another slough on Ship Shoal Island for a few minutes. On his first cast Mike reeled in his second channel bass of the afternoon.

He was through for the day, since a Virginia law prohibits either sport or commercial fishermen from catching over two red drum over 32 inches long in any given day. There was no question about Mike's being over that length. Both were identical 43-pounders. Jim's weighed 38½



prising numbers of drum have been caught there by fishermen who knew where and how to fish for them.

Most channel bass veterans, including Rogers, the unchallenged master of the sport, prefer to do their fishing during the last two hours of the falling tide and the first two hours of the rising tide. And remember: here there is a five foot tidal difference between mean high and mean low.

Small peeler crabs, available at numerous places on the Eastern Shore, are unquestionably the best bait for luring a channel bass. But these are difficult to keep on your hook and you'll find you waste a lot of time reeling in to check on the bait's condition when you use them.

Personally, I had rather use the diagonally sliced head of a *fresh* spot or fatback (jumping mullet). This stays on the hook exceptionally well and creates a good slick, often attractive to a channel bass.

A strong rod with lots of casting power is almost a necessity. You'll need it to provide the punch required to reach that outer bar. Thirty-pound test monofilament or 36-pound dacron does nicely on the conventional revolving spool reel. If you're a spinning devotee don't use anything less than 20-pound line and a reel which holds *at least* 250 yards.

Many of the Eastern Shore islands are bordered by offshore sod banks, a constant reminder that nature has taken her toll in beach erosion, for the sod was once part of a sun-drenched beach. If your sinker should get stuck in one of these banks, you'll need tackle at least as strong as that recommended above to free it.

The terminal tackle should consist of a 30-inch length of heavy monofilament, about 60-pound test, attached to a 9/0 hook. This can be connected to the line with a snap. The sinker is mounted on a fish-finder rig which allows it movement freedom when a fish strikes.

Surf fishing is never easy. But it can be productive—especially when you fish in my favorite hole on Smith Island.

pounds, only a pound and a half short of the minimum requirements for one of the lovely laminated plaques awarded by the Virginia Tournament which Claude directs.

Two days later Claude took another party of outdoor writers and photographers back to the same hole and returned with five channel bass. This time their weights ranged from a "light" 26 pounds up to a pair of fine 54-pounders caught by Dolly Lagocki of Camden, N. J.

Channel bass fishing on the Eastern Shore's Barrier Islands isn't limited to the two spots mentioned in the above paragraphs. Other productive islands in the chain of uninhabited reefs which stretch from Chincoteague and the Maryland border to the north to Cape Charles to the south include Assateague, Wallops, Metompkin, Assawoman, Cedar, Parramore, Hog, Cobb, Wreck, Myrtle and Fisherman.

All will produce channel bass in the fall and again in the spring. Only Assateague, the northern most in the chain, and Wallops, just south of Assateague, are connected to the Eastern Shore mainland by bridges. Others can be reached only by boat. There is a sportsman's hotel, complete with beach buggy, located on Cedar Island.

Wallops Island is the testing grounds for the National Aeronautics and Space Administration's rocketeers, and consequently is off limits to the casual angler. A toll bridge and causeway to Assateague was completed in the fall of 1962 and has been open to traffic and anglers since. Sur-

Mike Williams brings a nice channel bass through the surf as author Hutchinson looks on.





Autumn's Cobwebs Across the Sun

By EMELINE WENSLEY
Hyannis, Massachusetts

ON the appointed day in autumn nature sets the stage for a shower of gossamer, an airborne army of ballooning spiders, one of her most beautiful and unusual phenomena.

The invading hordes, clinging to their handmade silken parachutes, float on a gentle, rising breeze blowing up from the lowlands about Halloween time when the witches and hobgoblins ride the wind, too.

Fine traceries of the silken chutes catch the rays of the sun and reflect them so as to produce a shimmering silver effect in the sky. When the spiders land and desert their carriers, the silken strings flutter in the gentle wind from the trees, the telephone wires, fences. The windward side of trees and poles are coated with a sheer web of silvery silk. Autos trail strands of silk from radio antennas, bumpers.

By strange instinct, Mr. Spider knows when the day has

arrived and climbs to the tip of a twig. He points his tail into the wind. The tail contains the insect's spinneret, and he transfers some of the liquid from his silk sac to the end of his tail. He sits and waits. On contact with the air, the liquid silk is turned to plastic silk and is gently drawn from the spinneret by the rising wind until it stretches far into the air.

When sufficient silk has been spun and the wind carries the spider away, he wraps his legs around the strand so as to remain airborne. He may travel for miles before he lands, severs the strand and looks for a new home.

The shower of gossamer can be made by many varieties of spiders, but it is usually undertaken by a tiny and harmless species. If this method of distribution were not possible, the spiders would overrun one locality and devour one another until they would be extinct.

The Striped Skunk

(*Mephitis mephitis*)

By DOROTHY E. ALLEN
Education Officer

A GUNFIGHTER has nothing on the skunk when it comes to a fast draw, unerring accuracy and adherence to the code—"never fire without giving warning." Its warning: It pats the ground with stiffened front legs, clicks its teeth, growls and hisses, and if all this fails, up goes the superb plume tail. The skunk performs a handstand act while emitting its odoriferous assault. It's amazing that a little creature the size of a house cat can make such a large impression on the atmosphere.

Actually this chemical warfare artist itself is not a foul smelling creature and has very little unpleasant odor about

borders and wooded ravines, and open grassy fields where food is readily available.

Its front feet have long claws with which it digs its burrow, which is usually made in light soil. The skunk often makes its home in some crevice in the rocks, or even takes possession of an abandoned woodchuck's hole or may make its home under the barn. (Found in rock slides and rough forests of western Virginia is the spotted skunk, which is smaller and does not have continuous white stripes on its back.)

Skunks "hole up" and stay quiet for a few days or even weeks during extremely cold weather; then they live on their fat reserves but do not become cold blooded. On warmer nights they come out and forage actively even in midwinter.

The young skunks, called kits, appear in May. They are born in an enlarged part of the burrow, where a nice bed of grass and leaves is made for them. They are born blind, hairless and practically helpless. By one week fuzzy-like hair appears, and at the end of the month they poke their heads out of the den. The young skunks (4 to 10) are very active and play together like kittens.



its body or den. The disagreeable scent or musk is secreted by two internal glands located at the base of the tail on the underside of its body. The skunk exercises voluntary control over these scent glands. This stream can be directed accurately for 5 to 10 feet and somewhat less accurately for 20 feet. The odor may carry $1\frac{1}{2}$ miles downwind. The thick, oily, volatile liquid is white, yellow or greenish-yellow in color, and is distinctly phosphorescent at night. The secretion is very acid and the smell lingers for weeks after expulsion.

The skunk, a nocturnal mammal, clearly advertises itself promenading in the evening. Its body is covered with long shining jet-black hair with a snowy stripe from nose to forehead, where it spreads out into a cap, and at the shoulders it forks into two stripes down the back and along the sides of the tail. Its front legs are very much shorter than its hind legs, and this gives it a cumbersome waddle. This "chemical plant" lists from side to side as weight is shifted in a lopsided shuffle.

Found throughout the state except in a few Tidewater counties, the skunk prefers farmland and clearings, forest

The little "stinker's" appetite is cosmopolitan: he eats anything that is available. The skunk's eating habits often prove beneficial to farmers since it eats grubs, worms, beetles and meadow mice, which would otherwise ruin meadows and crops.

Because its discharge is so disagreeable to all other creatures the skunk's intelligence has not become so highly developed as has that of some animals. It has not been obliged to rely upon its cunning to escape its enemies, and has therefore never developed either fear or cleverness. It marches abroad without haste, confident that every creature which sees it will give it plenty of room while it practices Teddy Roosevelt's axiom "speak softly but carry a big stick."

More than a million pelts* are taken annually in North America. The finest skunk pelts are often dyed and sold as imitation furs of a higher quality.

The striped skunk is a much misunderstood fellow with B.O., but he's an interesting form of wildlife to study.

* *Arizona Highways*, January 1963.



Fourteenth in the series of articles on some of the favorite angling hot spots in Virginia.

SMITH MOUNTAIN LAKE

By OZZIE WORLEY
Roanoke

"I CAUGHT 50 bass there yesterday," the first man boasted.

"So what?" shot back a second man. "I hooked 100 one day last week, and got the last two on tinfoil!"

Sound like a conversation in a wild dream? No such thing. It actually took place between two fishermen who had visited the hottest bass spot in Virginia this year—Smith Mountain Reservoir.

This new lake, with a 500-mile shoreline, extends almost 40 miles along the Roanoke River and about 20 miles up the Blackwater River. It ranges into Bedford, Campbell, Franklin and Pittsylvania Counties.

When the lake reaches capacity late this summer or early this fall, it will become the largest fresh water impoundment fully within Virginia. The lake is formed from a dam built

by the Appalachian Power Company at Smith Mountain Gap on the Roanoke River about 46 miles downstream from Roanoke and about 33 miles northwest of Danville.

Long before the initial impoundment of water began in late 1963, personnel of the Fish Division of the Commission of Game and Inland Fisheries started mapping plans for the fish program.

The two primary feeder streams, the Roanoke and Blackwater Rivers, were stocked with 30,000 smallmouth bass in 1963. The next year, just as soon as the first pool began to form behind the dam, one million largemouth bass fry were released.

Approximately one-half million striped bass babies were dumped into the lake in May of 1964. They were hatched by Fish Division workers from eggs collected from stripers taken from the Roanoke (Staunton) River at Brookneal.

Muskellunge were stocked on two occasions in 1964—in July when 6,310 averaging 3 inches were freed and in October when 500 between 7 and 11 inches were released.

No bream, crappie or other panfish were stocked in the lake, or will be. The Fish Division men felt there was a sufficient supply of these in the original streams for them to get a head start.

The important matter of the appetites of the bass wasn't overlooked. First, a stock of threadfin shad and gizzard shad was collected from a Tennessee Valley Authority lake and hauled to Smith Mountain for release. Next, approximately 5,000 landlocked alewives, which are members of the herring family, were obtained from New Jersey and placed in the lake.

Providing adequate food for the fast-growing predator fish offered a challenge to the Fish Division. However, it is thought that the two kinds of shad, coupled with the alewives and the rough fish already in the lake, will solve this problem.

Of all the fish in Smith Mountain, the muskies hold out the most exciting possibilities for the future. Last year's stocking of them in this lake, plus some other streams, marked the first time they have been placed in Virginia waters.

Some have been caught already, promising that they are making the grade. Robert Martin, chief of the Fish Divi-



A sailboat, once a rare sight in Virginia's western counties, rides gracefully at anchor near Hales Ford Bridge on Smith Mountain Lake.



Jasper Jones of Roanoke holds four-pound, three-ounce smallmouth bass caught near where Back Creek flows into Smith Mountain Lake.

sion, has reports on several reeled from the Shenandoah River and Smith Mountain.

In Lake Brittle, a Commission-operated lake in Fauquier County, one fisherman has caught two muskies.

Wherever they are hooked, the fighters must be 26 inches long to be "keepers."

There is, likewise, a size limit on all bass caught in Smith Mountain and the smaller lake below it, Leesville. Largemouths, smallmouths and stripers must be 12 inches long.

As Smith Mountain Reservoir spread past such landmarks as the Hale's Ford Bridge in Franklin County early this year, fishermen from Roanoke, Lynchburg, Bedford and many other places eagerly watched and waited.

The sting of winter was still in the air when the first anglers braved the elements and landed bass in the lake.

Since then, with the arrival of warmer weather, people have swarmed to the lake as if a gold rush were on.

Fabulous catches have been made by both the fishermen and the game wardens. The anglers have racked up strings of largemouths, smallmouths, crappie and bream. The wardens have issued summonses in wholesale lots to people having bass under the 12-inch limit, too many bass, or both.

In the lower courts at the county seats of Rocky Mount and Bedford, most of the lawbreakers paid \$10 or more in fines, plus costs, and also had to ante up replacement costs for the bass. This meant \$1.50 for largemouths and \$3.50 for smallmouths.

To help enforce the 12-inch rule, game wardens from other parts of Virginia were assigned to patrol Smith Mountain periodically to assist the regular wardens.

The prospect that many small bass were being released by fishermen, only to die, prompted one Roanoke angler, Bob Wilmore, to hand out advice on the proper way to free them.

"Use loose, unsnelled hooks," he suggested to a Roanoke newspaper, "because they don't cost much and the fisherman won't lose much when he cuts a bass loose with the hook still in him."

Wilmore also urged anglers to lower the undersize bass gently to the surface of the water before snipping the line.

His experiences on the lake are typical of hundreds of others. He and a companion caught over 100 fish one day. "Believe it or not," Wilmore said, "I got the best one—a 14-inch—on a bare hook."

All sorts of stories have made the rounds about people who tried to get away with undersize bass. Here is one of them:

A warden closed in on a fisherman in a boat and inquired about his luck. "Not much," he replied. The warden, spotting a sack in the boat, asked what it was for. "Oh, I clean up with it," said the man.

When the warden reached for the sack, several baby bass tumbled out.

"Now how in the devil did they get in there?" mumbled the crestfallen fisherman.

Warm weekends this spring brought traffic snarls to many of the secondary roads leading to, and dead-ending at,

(Continued on page 22)

Impoundments bring motorboating from the seacoast to the mountains. This speedster cuts a wake near Hardy Ford Bridge.



Introducing:



Richard F. Beirne III of Covington, editor and publisher of the afternoon daily *Covington Virginian*, member of Board of Directors and past president of Alleghany Chapter, Izaak Walton League.



Custis L. Coleman, M.D., of Henrico County, practices medicine in Richmond, is a director of Richmond Chapter, Izaak Walton League.

OUR NEW COMMISSIONERS



Homer G. Bauserman, Jr., of Arlington, filling the vacancy created by expiration of his father's term as Commission member, is a long-time member of Arlington Rod and Gun Club and Western Virginia Sportsman Association.



G. Richard Thompson, of Marshall, president of the Marshall National Bank, has been active in the Fauquier County Fish and Game Association for more than 20 years.

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

DOVE NUMBERS DOWN IN NON-HUNTING STATES. The eastern dove population index was down 12.22% in 11 non-hunting states as compared to only a .04% decrease in the 16 states where they are hunted, according to the results of the 1965 call count census released by the U. S. Fish and Wildlife Service. Although a strange quirk of nature, this does not mean that hunting is beneficial to the dove. It does, however, lend strong support to the argument that properly regulated hunting is in no way detrimental to dove populations. Actually estimated dove breeding populations in non-hunting states in the east over the past 12 years have closely paralleled the ups and downs observed in states where they are hunted.

For the entire eastern management unit, including hunting and non-hunting states, the population index was down 3% placing it 1.4% below the 10 year average. In Virginia the breeding population estimate was 17.15% below that of last year. "This might mean a slight decrease in the abundance of locally reared birds during the early part of the season," said Game Division Chief R. H. Cross.

The call counts are conducted annually over the same routes in each state by state and federal wildlife workers. They are statistically compared with results from previous years and other states to develop a portion of the basis for the federal migratory game bird framework.

\$6,923 IN GAME COMMISSION TIMBER REVENUE RETURNED TO COUNTIES. Following final accounting the Commission of Game and Inland Fisheries has issued checks totaling \$6,923 to eleven Virginia counties as their share of timber sales from Game Commission lands within their county during the 1964-1965 fiscal year, Executive Director Chester F. Phelps announced. The basis for this procedure was set up by the 1964 Virginia General Assembly to alleviate tax losses in counties where these tracts of Commission-owned land are located. The individual checks ranged from \$10.31 to over \$1600, but in most cases they were equal to or in excess of previous tax assessment on these properties.

"The Commission is working toward a balanced and sustained timber harvest from these lands," Phelps said, "and as this goal is reached payments should become more in proportion to the land area and timber quality involved." Since timber is harvested only to enhance wildlife habitat and recreational facilities, there is no assurance that timber will be harvested from each area each year. As established by the General Assembly, counties are to receive 25% of the proceeds from timber sold within that county after the cost of necessary road construction has been deducted.

JULY 1, 1964 THROUGH JUNE 30, 1965

Name of County	Gross Sales	Road Costs	Net	25% to County
Augusta	\$ 2,397.28	\$ 740.80	\$ 1,656.48	\$ 414.12
Bath	4,978.24	-	4,978.24	1,244.56
Highland	1,584.93	-	1,584.93	396.23
Madison	6,457.30	-	6,457.30	1,614.33
Powhatan	6,635.40	-	6,635.40	1,658.85
Roanoke	41.25	-	41.25	10.31
Rockbridge	5,669.56	2,517.33	3,152.23	788.06
Rockingham	1,259.07	384.80	874.27	218.57
Smyth	1,722.00	-	1,722.00	430.50
Tazewell	535.80	-	535.80	133.95
Washington	54.20	-	54.20	13.55
11 Counties	\$31,335.03	\$3,642.93	\$27,692.10	\$6,923.03

Hunting Lineup (Continued from page 5)

The remaining east of the Blue Ridge Counties have a November 15 through January 5 deer season except in the Dismal Swamp Area where Legislative seasons prevail. The bag limit is 2 deer per license year, 1 of which may be a doe in Caroline, Essex, Isle of Wight, King George, King and Queen, King William, Lancaster, Nansemond, Northumberland, Richmond, Southampton, Surry, Sussex and Westmoreland Counties and in Chesapeake and Virginia Beach cities.

The northern counties of Albemarle, Culpeper, Fairfax, Fauquier, Greene east of Route 29, Loudoun, Louisa, Madison east of Route 29, Orange, Prince William, Rappahannock, Spotsylvania and Stafford have a bag limit of 1 deer per license year with either-sex shooting permitted on the first day only. The remaining eastern Virginia counties (except Northampton which is closed) have a bag limit of 2 bucks per license year.

Small game season west of the Blue Ridge begins November 1 and ends January 31. East of the Blue Ridge rabbit, grouse, and squirrel season (with the exception of certain special early squirrel seasons) opens November 15 and extends through January 31. Rabbit season in Accomack and Northampton Counties ends January 15. Quail season in the eastern counties continues through February 15 except that in Amherst, Nelson and Rappahannock Counties it will end on January 31.

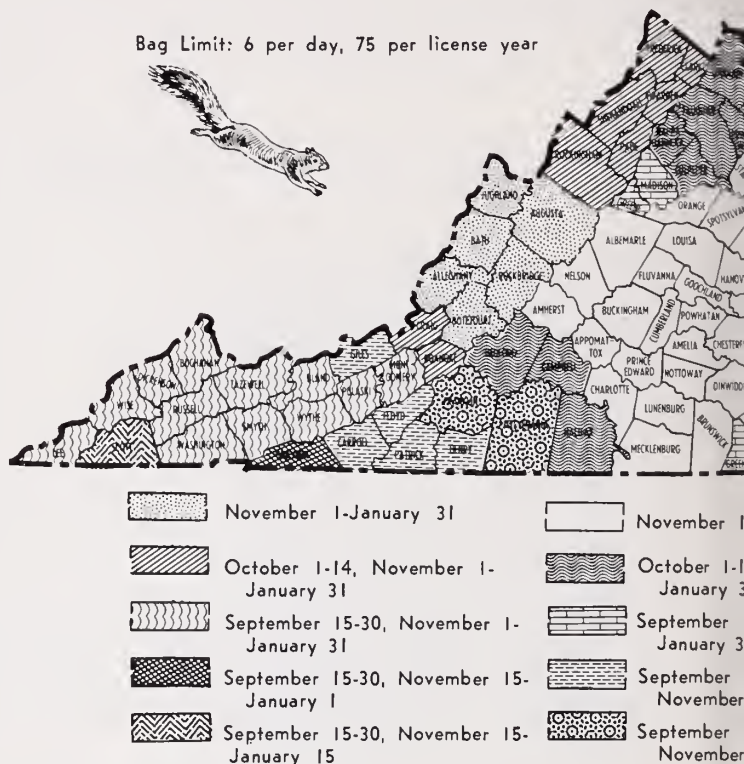
The statewide bear season is November 15 through January 5 with Legislative Act seasons in southwest Virginia and in the Dismal Swamp Area remaining as they were last year. Bear hunting is not permitted on the National Forests or on Commission-owned lands until November 15, and dogs may not be used to hunt bears on these lands until November 29.

A turkey season beginning November 1 and ending December 15 is again on tap for Alleghany, Augusta, Bath, Botetourt, Craig, Frederick, Giles, Highland, Montgomery, Roanoke, Rockbridge, Rockingham and Shenandoah Counties. A December 15-January 15 season will be in effect for counties of Albemarle, Amelia, Amherst, Appomattox, Bedford, Brunswick, Campbell, Caroline, Charlotte, Chesterfield, Cumberland, Dinwiddie, Fauquier, Fluvanna, Goochland, Halifax, King and Queen, Louisa, Lunenburg, Nelson, New Kent, Nottaway, Orange, Powhatan, Prince Edward, Prince George, Prince William, Spotsylvania and Stafford Counties. The bag limit will be 1 turkey per day, 2 per license year, either sex except that only gobblers may be taken in Cumberland and New Kent Counties, the latter having a 1-per-season limit. Pittsylvania will have its usual November 15-January 31 Legislative season with a bag limit of 1 gobbler per day, 2 per license year.

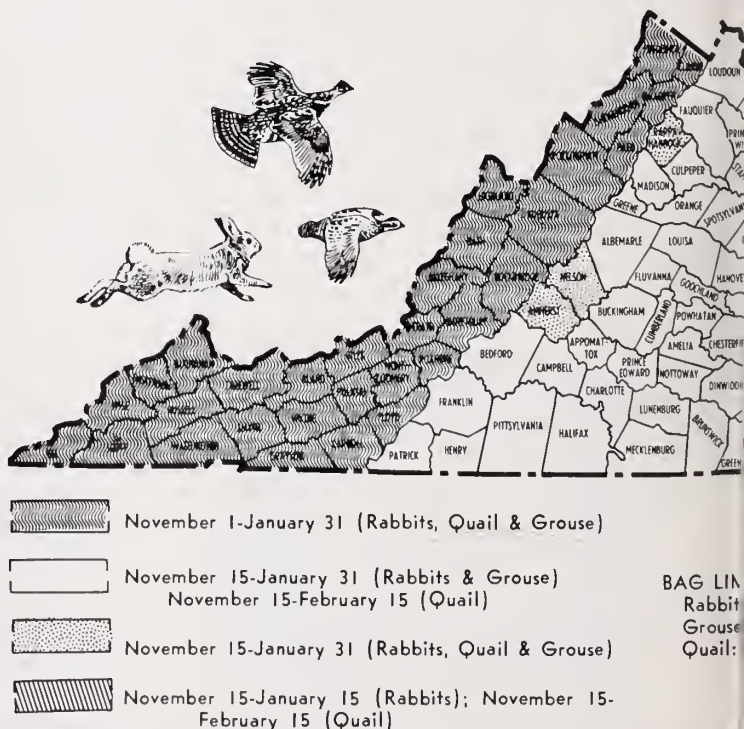
No person is allowed to have in his possession more than the daily limit of any wild bird or animal while in the forest, fields or waters of this state.

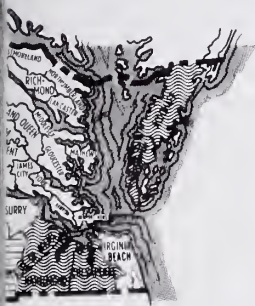
1965-66 Squirrel Seasons and

Bag Limit: 6 per day, 75 per license year



1965-66 Rabbit, Grouse and Quail Seasons





ry 31

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




ovember 15-

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1965-66 Turkey Seasons and Limits



-  November 1-December 15—Two of either sex per license year.
-  December 15-January 15—Two of either sex per license year
-  November 15-January 31—Two gobblers per license year
-  December 15-January 15—One gobbler per license year
-  Closed to turkey hunting.
-  December 15-January 15—Two gobblers per license year

NO MORE THAN ONE TURKEY MAY BE TAKEN IN ANY ONE DAY.

and Limits



r day; 75 per license year.
r day; 15 per license year.
day; 125 per license year.

1965-66 Bear Seasons and Limits



-  November 15-January 5
-  November 1-January 5
-  October 1-November 30
-  November 10-January 5

BAG LIMIT

1 per license year (over 75 pounds live weight).

Trout Capital of the East

By DON CARPENTER
Annapolis, Maryland

A HALF mile high in Virginia's Switzerland, Monterey, raising and catching rainbow trout is big business for the Virginia Trout Company, home of "Allegheny Mountain Trout."

The mountain water does make the difference at VTC's unique operation in Highland County, now rightfully termed "The Trout Capital of the East." Huge springs of good limestone water, flowing over 2,000 gallons a minute, are an important factor in raising a crop of one and one-half million rainbow trout a year, of which a quarter million now go to market annually as table fish for gourmets. Also, production is being increased rapidly.

"Allegheny Trout" are also helping 14 landowners in Highland County, designated by the U.S. Government as a "poverty area." These 14 farmers now rearing trout for V. T. Company earn \$2,000 to \$3,000 a year (more than they can from crops) by growing fingerling trout, provided by VTC, to mature size, at 10 cents a pound. A good supply of pure, cold, mountain spring water is necessary for success.

Bruce R. Richardson, Jr., president of the Virginia Trout Company, who is also president of the U. S. Trout Farmers Association, a national organization which publishes an interesting bimonthly magazine, "The U. S. Trout News," has a very able manager in William H. Smick, Jr.

Bruce and Bill buy eyed rainbow trout eggs from Trout Lodge, Soap Lake, Washington State, in the Pacific North-



Rainbow trout in hatchery rearing pool, about ready for transfer to outdoor raceways to complete their growth.

Trays of 80,000 "eyed" rainbow trout eggs are hatched in batteries fed by clean, cold, running water.

Virginia Trout Co. photos



west and the eggs are shipped by air express here via Dulles and Staunton airports, then rushed to a battery of special, new, hatchery trays that accommodate 80,000 eggs at a time . . . to hatch in about two weeks.

When the newly hatched trout with egg sac attached appear, they are transferred to wire baskets in indoor concrete rearing pools fed by pure spring water. There they live on, and absorb the egg sac as food until they reach the "swim up" stage when feeding is required on the hour, 12 hours a day (dry feed 31% protein, plus vitamins).

It's interesting to note that the newly hatched trout, with egg sac attached, swim close to the bottom of the wire trays at first—just like their wild brothers do when first hatched among the pebbles of a stream bottom, where they stay deep among the protective shelter of the stones to avoid predators.

When the "swim up" stage of development comes, the malformed and crippled trout remain deep and, after the healthy fish are removed, are allowed to go down the drain, where a few survive in public fishing waters below the hatchery.

From the fingerling stage upward, efforts are made to keep trout together in an equal size, so as to reduce the chance of cannibalization. (All trout eat each other.) VTC is now rearing their trout at a rate of about one inch per month, with forced feedings.

When the husky, active fingerling rainbows graduate from the indoor rearing troughs to shallow outdoor pools fed from rushing cold water, they are provided with an overhead shelter to protect them from the sun which can cause sunburn and resulting death. Feedings continue in the fry and fingerling stages, on the hour 12 times a day;

but when the trout grow larger they get only 3 feedings of adult pellet food a day. Very small trout have a tendency to "ball" or swim closely together in the early stages. The reason for this is still unknown; perhaps it's for mutual protection.

Among every 5 or 10 thousand trout will be found a blue fish, as colorful as any bluebird. I saw 3 or 4 at the hatchery. A few black trout also develop, but most of these fish will die. The worst trout diseases are, first, "The Gill Disease"; and, second, various funguses, according to Bruce Richardson. Water pollution and predators are also bad problems for trout farmers. Birds, snakes, and raccoons are persona non grata at VTC. Lights and night watchmen protect the trout from human poachers after dark and a watch dog discourages raccoons.

While observing these rainbow trout in various stages of growth from 5 inches to a foot long in the many raceways, it is interesting to see the natural instinct of these game fish to swim upstream. At the head-screen of each rearing pool, I could see dozens of small fish leaping into the air as they tried to move up the falls of water flowing into their pools.

Virginia Trout Company now has 60 raceways and rearing pools or impoundments; also four buildings and five miles of leased private water used for commercial, sport trout fishing. They have 14 employees at their processing plant in addition to the 14 farmers who cooperate in rearing fish. Sportsmen now catch about 10,000 of their trout each season from two large pools and their 5 miles of leased fishing water.

Many thousands of VTC's "Allegheny Trout" are sold annually for stocking streams and lakes around the Commonwealth and to 150 customers, and in 3 other states. Among the better known Virginia hotels buying fish from VTC for their guests are The Homestead Hotel and the Cascades Inn at Hot Springs. Some of the best trouting in the East is provided for guests at \$7 a day, or for non-guests at \$11 a day, with an 8-trout-per-day bag limit. Fish are mostly 11 to 18 inches long, some measuring up to 20 inches.

Visitors at Virginia Trout Company's two leased streams (about 100 in the first month of 1965) mostly caught their limit of four foot-long rainbows at a fee of \$3.25 per person, per day. This a very uncrowded sport for fly casters, who are purposely placed in various areas to provide plenty of elbow room. A special 3-day resident or non-resident license is sold at VTC for only \$1.50, and no trout stamp is required by the state.

A serious handicap to trout fishing of any kind in this Northwest corner of the Old Dominion is the ancient and antiquated "No Sunday Fishing Laws" of three counties, namely, Highland, Bath and Craig. Highland County has recently relented enough to allow Sunday angling after 1:00 P.M.

The drought years of 1963-64 have reduced the water table in Highland County, and caused the water supply to be reduced as much as 50 per cent. Spring rains in 1965 may have improved water conditions this year. VTC's stream fishing suffered due to low water last year. However, hundreds of anglers fished in the two commercial lakes at the hatchery and caught about 10,000 trout averaging one to five pounds in 1964. (No license is required.) Rates for this pond fishing are 50 cents a day to fish and 9

cents for each ounce of fish kept. Any kind of bait or tackle is O.K., you must keep all you catch, and the only bag limit is your pocketbook. These rates include: weighing, cleaning, packaging, and icing your catch.

An attractive shelter with fireplace and picnic tables is provided for pool fishermen and their families at the main VTC grounds on Route 220. One pool is packed with rainbows weighing up to 4 pounds where the catching is easy; the other is stocked with trout to 7 pounds, and the fishing is definitely for experts. VTC *does not feed* the trout in either pond.

The modern, spotless commercial freezer and trout processing plant at VTC now supplies such chain stores as Safeway, and other retail outlets. Even President L. B. Johnson at the White House is said to have served Virginia "Allegheny Mountain Trout."

Gaily colored packages of 2 frozen trout weighing 12 ounces, a one-half pound trout, 10-pound boxes plus an assortment of boneless trout packages are marketed in many nearby states and have become very popular with gourmets. The trademark is a trout jumping for a fly.

Personally, I prefer to eat my trout with the head on because I have learned to hold the fish by head and tail and eat it like corn-on-the-cob, thus having no bone trouble. (Trout have a skeleton that holds together.) However, my wife Peggy says the fish's eyes "haunt" her when she sees them looking up out of a pan, so I get mine beheaded these days.

Some of VTC's best leased fly fishing water is located about 10 miles south of Monterey on Route 220, where I fished in May and caught a limit of trout using dry flies
(Continued on next page)

Large limestone spring supplies 2,200 gallons of clean cold water per minute to the hatchery that rears "Allegheny Trout" for stream stocking, for market, and for fee fishing.



Trout Capital of the East

(Continued from page 17)

and a 2-ounce Orvis rod. My best success was with a Phillip's No. 8 natural deer hair fly and a Powder Puff tied on a No. 8 hook. I had 2 miles of water to myself, and the water reminded me of many West Coast streams because there was plenty of room for a back-cast.

My wife Peg and I stayed at the J. P. Ruddick's new Montvallee Motel in Monterey and ate good food, reasonably priced, at the High's restaurant one block away. Nearby in the town the new Monterey High School has been built on top of a large spring on top of the mountain divide, and the spring water flows in two directions forming a part of the headwaters of both the James and Potomac rivers, a little-known fact. (The Jackson River is a tributary of the James.)

The Bullpasture River, one of Virginia's better trout streams, is close to Monterey.

In these streams, the rainbow trout will be mostly found in the swiftest current entering a pool. I found that a 6 to 7½-ft. Ashaway knotless, tapered leader 4X or 5X was perfect for my 2-ounce rod and Ashaway double tapered line. Hip boots or chest-high waders can be used; I tried both. The streams are full of minnows to keep the stocked trout fat and sassy.

While watching other anglers fish in this area, I noted that most grabbed their hooked fish around the middle, just like they squeeze a beer can. Apparently, they do not know that if they release the fish it will always die of either a ruptured air bladder or from fungus.

There is *ONLY ONE WAY* to safely handle a trout you wish to release—and that is by holding it with 2 fingers by the jaw only, taking care not to touch the body anywhere. It is better, if you are afraid of a trout's teeth, to use a barbless hook if you plan to release any fish. Just give them slack in the line so they can get off without handling. Wetting your hands does not guarantee that a released trout will live.

Refrigeration area of processing plant where one and a half million trout are handled annually.



Virginia Trout Co. photos

Employees clean and prepare "Allegheny Trout" for market at the processing plant near Monterey.

When releasing trout place them gently into the water—and never drop them even a few inches. Fish dropped on their noses in shallow water always break their spinal cords, and a few days later a white spot appears on the neck, then the fish rolls over and dies.

I learned from Bill Smick at VTC that the black rainbow trout we occasionally see among stocked fish have a disease called "popeye," which is a nitrogen effect that causes trout to go blind or die. He also told me blind or fungus-infected trout usually have a gastric problem. Raising trout for stocking, table use, or sport fishing is a costly business with feed costing \$10 to \$12 per 100 pounds; disease, predator, and drought problems are always a handicap.

I talked to J. K. Livesay, Route 2, Waynesboro, Virginia, one of the happy anglers who enjoyed a family picnic at Virginia Trout Company's public fishing pool, where he caught 4 fighting rainbows averaging better than 2 pounds each, and he said he was satisfied with his sport and the price of \$1.44 a pound he paid for a bag of fine eating fish.

As our "put and take" trout stocking program wanes, and "eating" fish are harder to find, the lure of fish for a price, with guaranteed results, when the weather suits the occasion, is growing in popularity. Virginia may soon have more and more sport fishing for anglers who realize that trout are costly fish to rear and feed.

Virginia Trout Company with its unique cooperative trout hatching program is a leader in this country, and it is definitely a worthwhile place to visit, and to see the fine job they are doing.

As for Virginia's Monterey, the visiting sportsman will find almost no mosquitoes, no ticks or chiggers at this 3,000-foot altitude, which makes the place unusual. The scenery in Virginia's "Switzerland" is beautiful; and if you get up there in the month of March, they hold a "Maple Syrup Festival." Few know that this fine syrup, as well as trout, are Virginia Highland products.

SAFETY-- MARKSMANSHIP-- COMPETITION AT WEST POINT HIGH SCHOOL

By JOHN W. COURTNEY, JR.
West Point

THE first course in NRA Basic Rifle Marksmanship was conducted at West Point High School during the winter of 1952-53; there were 22 graduates. The first NRA Hunter Safety Course was conducted there during November 1953 for 110 students in Health and Physical Education. Each of the 110 students passed the written examination which followed the lecture-demonstration classroom work. Thereafter, with written parental consent, 68 were transported to the rifle range and completed the course.

Thereafter, the safety course became a part of the 8th grade Health and Physical Education instruction and during the past 12 years 670 West Point High School pupils have studied firearms safety in the classroom with 428 completing the NRA Hunter Safety Course. In addition, 214 pupils have successfully completed a course in NRA Basic Rifle Marksmanship. Many pupils and parents are grateful to Principal Homer A. Humphreys for his foresight in permitting the author, a pharmacist and NRA Instructor, to serve as an unpaid specialist in conducting the firearms safety and marksmanship program in the school.

West Point High School does not have a rifle range. However, members of the scholastic club are also members of the West Point Gun Club Junior Division, a non-scholastic club which rents an indoor range at the West Point Recreation Center and has a small-bore outdoor range on town property and a high-power rifle range in a sand pit belonging to the Chesapeake Corporation of

Virginia. Most of the rifles and equipment have been donated to the West Point Gun Club Junior Division by local businesses, civic clubs and individuals. The senior division of the West Point Gun Club has a corps of NRA Rifle Instructors, three of whom are former members of the West Point High School Rifle Club.


Membership of the school Rifle Club is about 30% girls. The club has its own officers, an active rifle team, and is affiliated with the National Rifle Association. In the early fifties the team competed mostly in postal matches which decreased in favor of shoulder to shoulder matches until in 1958 a league was formed. This league, the Eastern Virginia Rifle League, became registered with the NRA in 1959. It is now made up of 4 high school teams plus 2 college freshman teams, and competes annually for NRA trophies.

In addition to league firing, there are occasions when individual juniors compete in a NRA tournament. In all firing, when enough qualifying scores are accumulated, NRA qualification certificates, medals, and brassards may be ordered from the NRA.

The Rifle Club Varsity monogram is a handsome and coveted award which may be earned by members of the team. In addition, points earned by officers of the club and members of the team are added to those earned in other activities and sports towards possession of the activities monogram.

West Point High School 8th grade physical education class is shown slides during firearms safety class, October 1964.



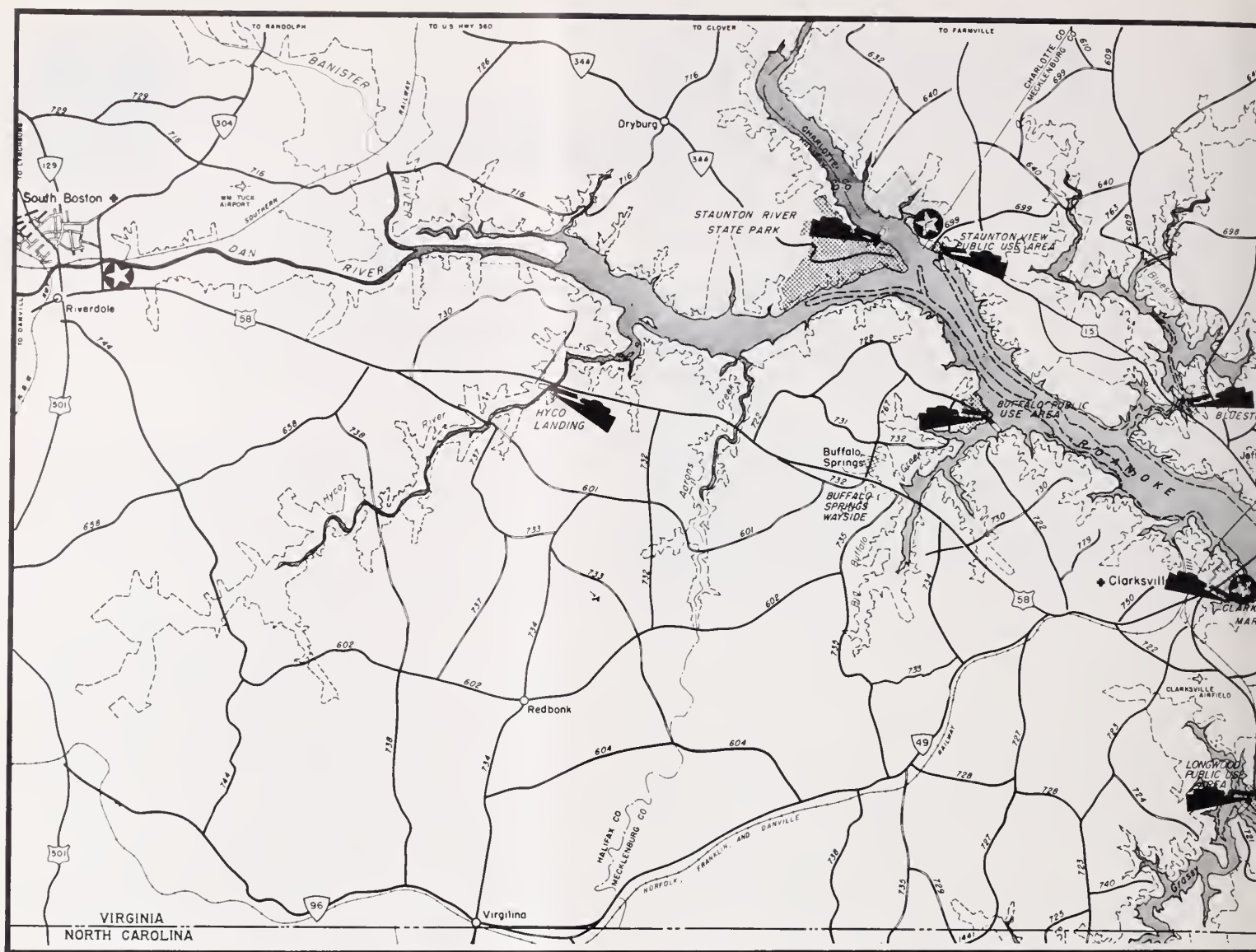


TIPPER FLINTLOCK'S
 Tips on Shooting Safety

**KEEP
 YOUR GUN
 UNLOADED
 WHEN
 NOT IN USE**

BE A SAFE SHOOTER

The National Rifle Association



By HARRY L. GILLAM
Information Officer

KERR RES

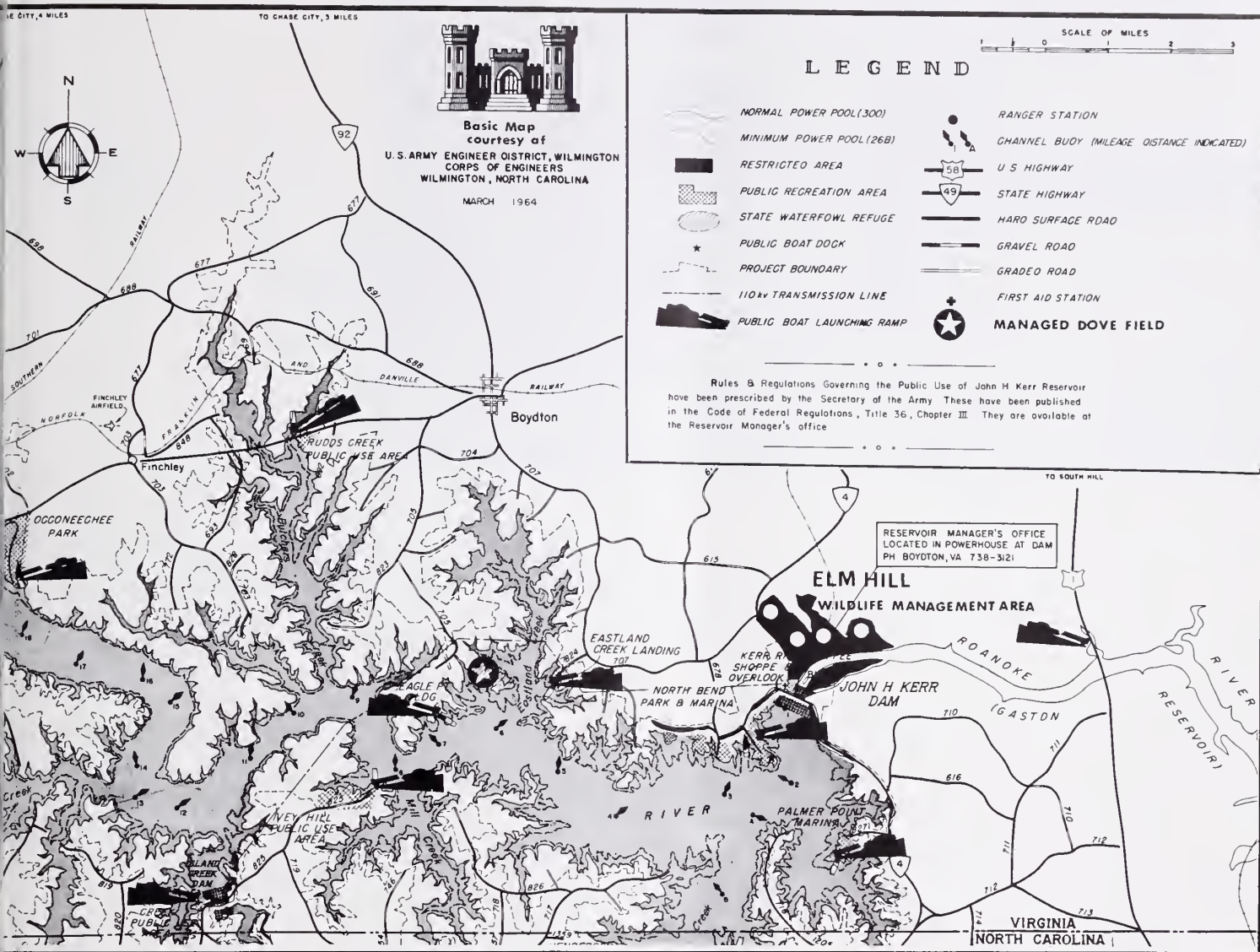
RANKING, with its 48,900 acres, as Virginia's largest body of fresh water, Kerr Reservoir has much diversity to offer boaters, fishermen and hunters. Although the lake is over 30 miles long, numerous boat-launching facilities on both sides provide rapid access to all parts of the reservoir. Twelve of the public ramps on Buggs Island Lake have been constructed by the U. S. Army Corps of Engineers as part of their recreational development program for the reservoir. Supplementing this program are three ramps on the upper lake and one below the dam on Gaston Reservoir constructed by the Commission of Game and Inland Fisheries.

Most of the Corps of Engineers' ramps are double, permitting the launching of two boats simultaneously and all are of concrete. Ramps are well marked with directional signs pointing the way from main roads. A large parking area has been developed by the Corps of Engineers below the dam to give bank fishermen access to the popular tail-water area which is closed to boats for 1000 yards below the dam. The Game Commission ramp downstream gives boaters access to the section open to boats.

Boat-launching facilities in this section are heavily used by both boaters and fishermen. Buggs Island Lake is a popular boating and water-skiing area with its large expanses of open water. As might be expected, the reservoir is one of Virginia's top fishing attractions. Most unique among the lake's finned residents are the landlocked striped bass which have become the dominant large predatory species in the reservoir. These silvery beauties, which attain a size of 30 pounds or more, are taken in large numbers throughout the summer and start a regular angler's stampede each spring as they begin their spawning run up the two main rivers which flow into the lake.

The lake is famous for its largemouth bass and crappie fishing. Not only are crappie taken in great numbers, many of large size are entered each year in the Game Commission's trophy fish contest. The current contest record crappie, a 4 pound 8 ounce specimen, came from this reservoir.

The lake is also one of the few places in eastern Virginia where walleye are found.



RVOIR

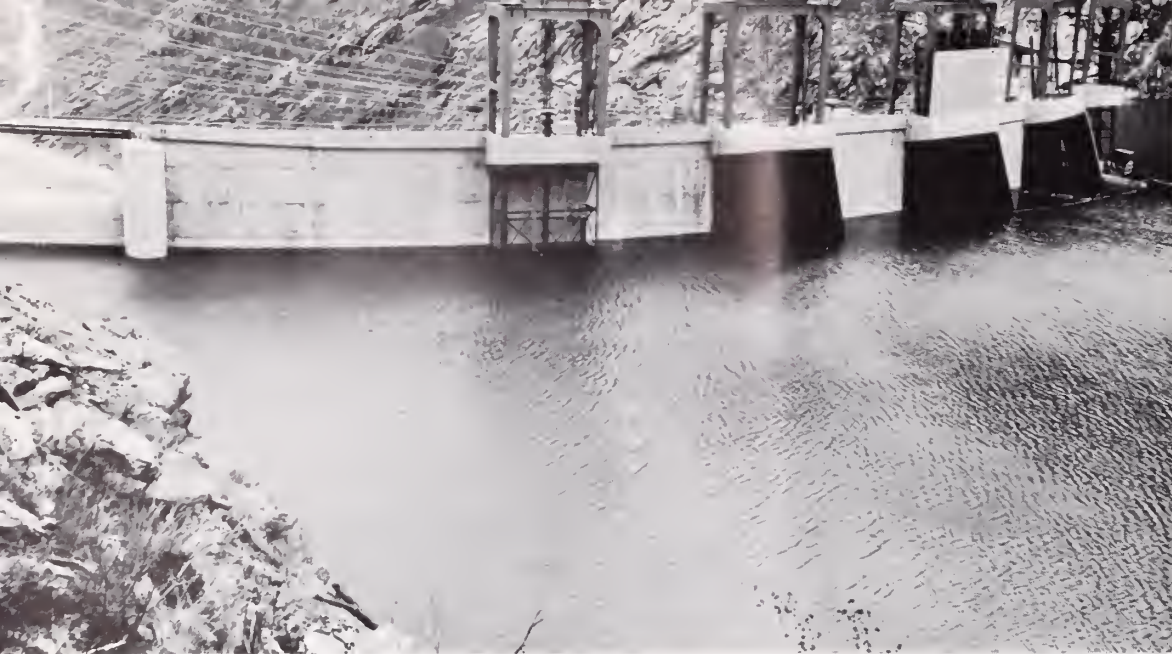
In addition to its many freshwater fishing opportunities, Kerr Reservoir lands offer a variety of hunting. There are approximately 38,000 acres of peripheral lands accessible mainly by boat, upon which the hunter may find good populations of quail, rabbits, squirrels and deer. Waterfowl plantings, initiated by the Game Commission, have attracted some waterfowl to the area. The Commission's Elm Hill Wildlife Management Area located just below is primarily to help build up wintering duck and goose populations in the reservoir area and thereby improve waterfowl hunting. Only floating waterfowl blinds are permitted on the lake and those require a permit from the reservoir manager.

A new program initiated in 1961 to provide public dove hunting has been phenomenally successful. Four fields on the reservoir planted to millet have resulted in average bags of as many as 9 doves per hunter on opening day. The Commission expects results equally as good from fields on nearby Elm Hill Wildlife Management Area.

Commercial marinas on the reservoir offer a complete line of boating services as well as boats and motors which may be rented. Numerous camp grounds developed by the Corps of Engineers and private entrepreneurs offer first-class accommodations for those who want to set up a base of operations on the lake shore.

Commission photo by Kesteloo





The deep end of Smith Mountain Lake, and the dam that created it.

Warren W. Gilbert Photo

Smith Mountain Lake

(Continued from page 11)

the lake. One man, hoping to launch his big boat on a Sunday, went down one of these roads and encountered such a traffic jam that he could not reach the water. He tried to back out. His boat trailer jackknifed on him and smashed into another car.

Problems such as his will be eliminated before the summer is over when six Commission of Game and Inland Fisheries boat-launching ramps are in operation. They will consist of a concrete ramp, a catwalk along the ramp, about one acre of graveled parking space and several more acres of sodded parking which can be used in dry weather.

One ramp will be at Hardy Ford Bridge, one at Hales Ford Bridge, one at Brooks Mill Bridge, two near the dam off Virginia 626 and Virginia 734, and one south of Scruggs off Virginia 601.

In the early part of the year, boaters put in wherever they could—off gentle sloping banks and from dead-end roads.

Besides the Commission-sponsored ramps, there are—or will be—several privately owned marinas. The first to begin operations was Saunders Marina at the dead end of Virginia 626, south of Moneta in Bedford County.

Another small marina is in operation at Hales Ford Bridge in Franklin County.

By the end of the summer, there were to be others. Under construction at Hardy in Bedford County is a marina which will be the closest to Roanoke. Cape Carlyn Marina at the end of Virginia 616 is scheduled to open soon, too.

Directly south of Moneta, off Virginia 823, a \$150,000 Smith Mountain Yacht Club is under construction. Its builders hope to have facilities for 50 boats in operation this year.

Three commercial camping grounds opened this spring. They are the Eagle's Roost Campground and Old Wagon Wheel Campground, both south of Moneta, and Pelican Point Campground, north from Union Hall in Franklin County.

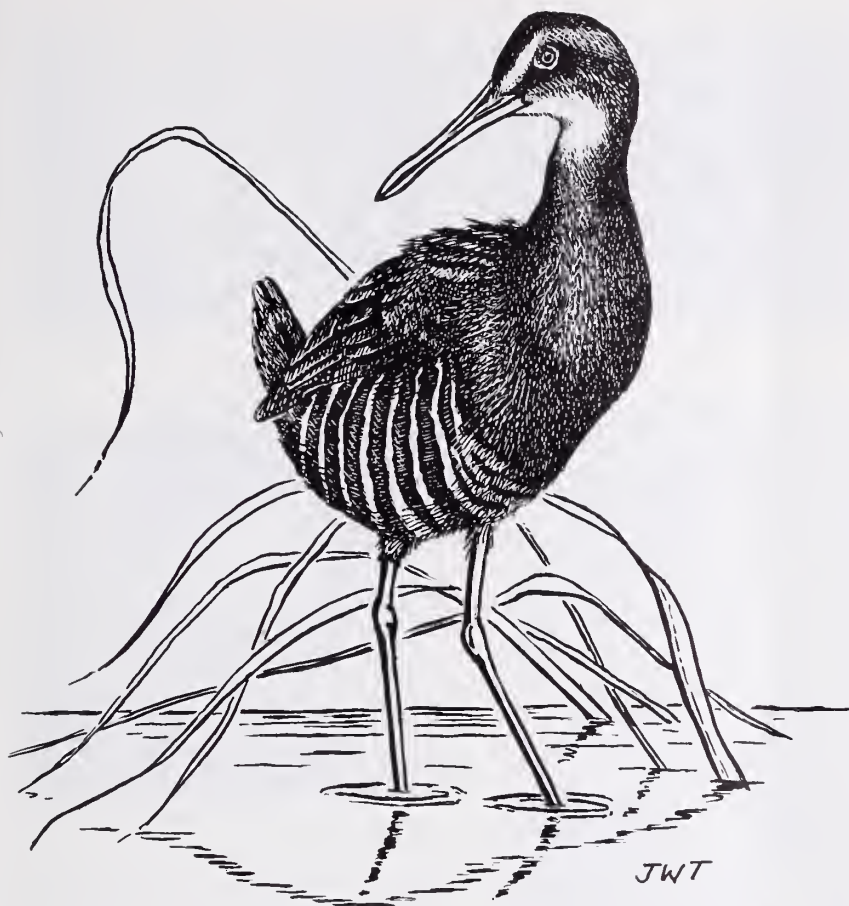
Appalachian Power Company is developing an extensive visitors' center and picnic area at the Smith Mountain dam site. These facilities should be completed next spring.

There will be an overlook with a walkway, offering views of both sides of the dam, and a visitors' building which will have displays telling the story of the Smith Mountain development. Below the overlook will be picnic facilities and possibly a fishing area reserved for youngsters.

Fish Division Chief Bob Martin has a bright prediction for the older anglers. By late summer, he says, the majority of the bass should exceed the 12-inch limit and the agony of having to toss back an 11½ incher will be a thing of the past.

Woman watches while men-folk fish on one of Smith Mountain Lake's many productive coves.





*Bird
of
the
Month*

King Rail

By DR. J. J. MURRAY
Lexington

ONE day in May twenty-five years ago a friend who lived in the edge of Lexington called me to come and see a strange bird which he had in a box. To my astonishment it was a king rail, a bird which I had always associated with the fresh water marshes of Tidewater. It had been captured in a chicken yard that morning in a Rockbridge County community with the historic name of Murat. The bird had come down into this yard and when found was trying to get through the fence ahead of a hungry cat. When I identified the bird for my friend he agreed to release it. This bird was captured not far from where an even more remarkable discovery, that of a purple gallinule, had been made that same week.

The king rail is a handsome bird. Indeed, its Latin name is *Rallus elegans*. Of the six rails found in Virginia—king rail, clapper rail, sora, Virginia rail, yellow rail, and black rail—this is the largest, although its eighteen inches of length are only three more than that of its salt water relative, the clapper rail.

The bill is long, and the legs also, with their long, wide-spread toes for walking on grass and leaves in the water. Its back is a warm olive-brown, heavily marked with darker streaks. Individuals vary much in the intensity of the colors. The breast is a rich reddish-brown, while the belly is marked with wide white bars of dark brown and narrower bars of white.

This rail is found in fresh or brackish water while the clapper rail likes the salt marshes. It is a common summer resident in the fresh marshes of the larger tributaries of Chesapeake Bay, occurring sometimes even in winter. Adults with small chicks have been seen at a pond near Roanoke, but in the Piedmont and west of the Blue Ridge it is usually only a rather rare visitor in spring or fall. In the Washington area it is rare in summer and only occasional in winter. Like all rails, these members of the family make queer sounds. The calls of the different species are so much alike that only those very familiar with the birds can distinguish them.

All the rails are very secretive. They do not flush very easily, preferring to run and to hide in the wet growth. Even when they do rise, they quickly drop back into the marsh grass. Only the clapper rail is easily found. To most people, as to this writer, the other rails are unfamiliar birds. One variety, the tiny black rail, I have yet to see.

The nest of the king rail, placed in wet spots but built up above the water, is made of weeds and grass. In it six to a dozen fairly large eggs, one and a half by one and a quarter inches, are laid. They are pale buff in color, marked with brownish spots. Like the young of all our rails, the birds at hatching are black. They can run and hide as soon as they are dry.



Edited by HARRY GILLAM

Record Marine Gamefish Research Budget To Benefit All Saltwater Anglers

The National Marine Game Fish Research Program was recently voted a record budget of \$1,006,000, according to Dick Wolff, vice-president of The Garcia Corporation, Teaneck, New Jersey. "The 1966 budget—bigger than ever before—will greatly benefit the nation's eight million saltwater sport fishermen, now and in the future," Wolff noted.

The increased appropriation, more than double last year's, is also a major accomplishment for groups interested in creating a significant national sport fishing research program. A five-year campaign, spearheaded by The Garcia Corporation and including the National Party Boat alliance and members of the Outdoor Writers Association of America, has continually emphasized to Congress the importance of saltwater fishing.

Part of the new research appropriation

is earmarked for the development of two Gulf Coast laboratory facilities, while a second part will be used to start construction of a laboratory facility at Narragansett, Rhode Island. The lion's share—around \$500,000—will support operations at the Sandy Hook Marine Laboratory (Highlands, N. J.), headquarters for the nation's marine game fish research program.

Among the research programs currently under way at Sandy Hook are studies of the growth and migration patterns of important sport fish (striped bass and bluefish among them), the effects of pesticides and pollutants on various species of game fish, and the density of food patterns of various species of shark.

One experiment conducted recently in the new saltwater tank established the feeding and activity patterns of bluefish during a 24-hour cycle. Other research includes preliminary work on color and sound sensitivity of selected marine game fish.

School Mascot



Journal-Virginian photo

This spirited-looking mounted bobcat was presented to the Abingdon County Elementary School as a mascot by the Washington County Sportsman's Club. Bob Johnson, president of the Washington County Sportsman's Club, is shown presenting the trophy to Clyde King, PTA second vice-president in charge of membership. The cat is to be placed in the room of the class which has the highest attendance record in each PTA meeting.

New Waste Treatment Process Is Developed

Testimony recently presented before the Subcommittee on Air and Water Pollution, Senate Committee on Public Works, indicates that a new and revolutionary method of waste treatment soon may offer a significant advance in attacking the water pollution problem.

Bertram C. Raynes of Rand Development Corporation, Cleveland, Ohio, explained the novel waste treatment process which was developed under sponsorship of the Office of Coal Research, Department of the Interior. The first step in the process utilizes coal to filter raw sewage. In the second step, the effluent from the coal filter is passed into a bed of sized coal in which organic contaminants are absorbed. In addition, certain pollutants and contaminants, such as phosphates and detergents, are removed. The plants also will develop a new market for producers of coal.

A demonstration model of the project now is in operation at the Washington, D. C., treatment plant. It now is ready to go to pilot plant size and a small city in the Potomac River basin soon may be tested.

Scholastic Rifle Team Selected



The above students comprise the Virginia All State College and Scholastic Rifle teams. Each was presented with a silver medal by the Virginia State Rifle and Revolver Association. In the top row, left to right, are James E. Hayes, Robert Vick, Jr., and Thomas C. Marshall of VMI and Lynn E. Young and Jack Osners of VPI. In the bottom row are Eugene Jones, Jr., and George Ware of St. Emma Military Academy and Charles F. Denmead, James H. Geron and Robert P. Carter, Jr., of West Point High School.



Edited by DOROTHY ALLEN

Scrap With Cat

No one ever really knows just how big a fish that got away might have weighed. But one group of young James River anglers came up with a 10-pound, four-ounce channel catfish that measured 28 inches in length.

The big cat got away three times. But each time, by rather frantic standards, it was recaptured and it finally surrendered in what it must have considered a bad day for cats.

Jim Whitney, who doesn't weigh much more than 100 pounds, was fishing with a spinning outfit rigged with 10-pound test line when the big cat hit his Rapala several yards below Bosher's Dam. He immediately was the center of attention among his fishing companions—Phil Hughes, Juney Wells and Tommy Meade. There may have been some jealousy because a couple of Whitney's fishing friends helped the big fish escape a couple of times.

According to Meade, Whitney needed help with the fish. "As soon as the catfish hit the lure it started to run. The catfish went out about twice as fast as Jim could reel. After an exciting 10-minute fight, Jim finally got the fish within netting distance—only he did not have a net.

"Phil Hughes waded into the river to help Jim. Phil took the line and lifted the fish. The line snapped and the huge fish fell into the water."

Whitney was not to be outdone. He dove into the water and grabbed the cat in a bear hug. He held on to his prize.

The cheering section then assisted and the big cat was pinned to a fish stringer with a silver and a smallmouth bass. Phil started for shore with the fish. "About halfway to shore he stepped on a slippery rock and fell. He dropped the stringer, immediately went into the water and somehow came up with the catfish. It was here that the catfish surrendered."

—From Max Ailor's "Outdoors"
Richmond Times-Dispatch

A Happy Lad



Billy Weaver, age 7, of Rawley Springs, with his six (6) trout, which were caught from Dry River, Rockingham County. Billy used salmon eggs and worms and fished after a heavy rain-fall in muddy water. He caught his fish in less than three hours with the largest being eleven inches in length. Billy was thrilled by his catch. D. L. Weaver, Billy's father, said by letter, "We appreciate the State's ideal methods and provisions for little people to obtain clean, sportsman-like enjoyment. Thank you."

(Pictured right): Franklin Game Wardens Gordon Preston and Jerry Whittaker pose with Scout Troop 363, sponsored by Burnt Chimney Ruritan Club, at a joint meeting of the Ruritan Club and Scout Troop, during which the Scouts were presented a hunter safety award and hunter safety patch on completion of a NRA hunter safety course. The course consisted of instruction, including showing of slides on gun safety, identification of guns and ammunition, safe gun handling and care of guns as well as actual firing on a range.

A Mockingbird's Friend

The following interesting letter was received from Matthew Ewoldt, Springhill Farms, Scottsville:

"For two weeks I kept a baby mockingbird that had fallen out of its nest and was not ready to fly. During this time, I kept it in a box with hay made into the form of a nest. I fed him and taught him how to fly. When he was able to fly fairly well, I put him in a tree. Later I went back to check on him and the bird had flown to a bush. The third time I went back other strange mockingbirds began to scold me and then I saw the baby bird fly away with them.

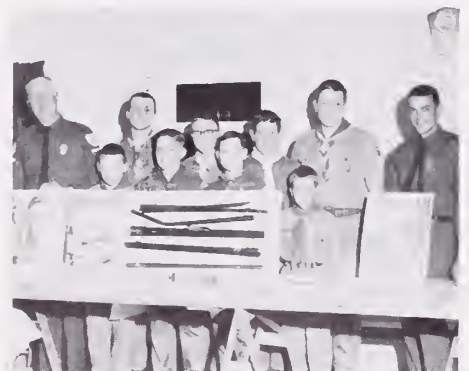
"A friend of mine banded the mockingbird so I hope I will see it again."

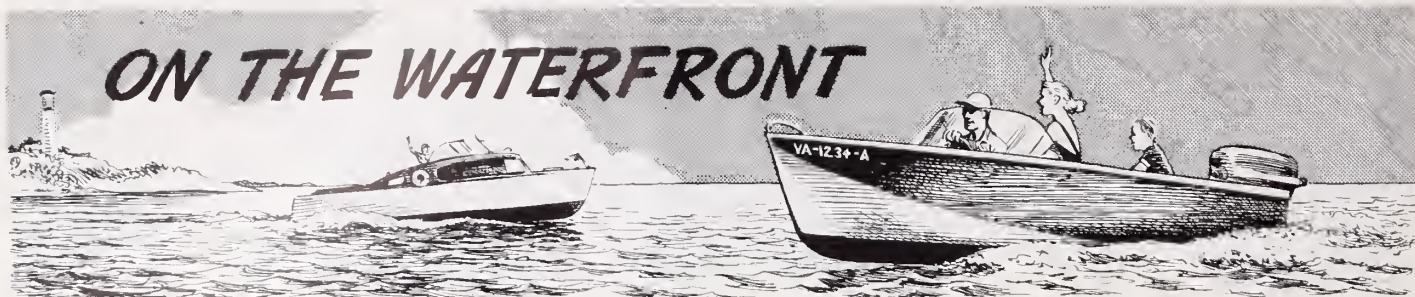
Gun Clinic



Covington Virginian photo
A group of Boy Scouts from different units watch with interest as the written tests they took on gun safety during the Twin Valley District Camporee in May are graded. The tests were given by members of the Allegheny Chapter of the Izaak Walton League and area game wardens. Willis Vail, district camping and activities director, graded some of the papers as Forest W. Hanks, County Game Warden, looked on.

Scouts Win Hunter Safety Award





Edited by JIM KERRICK

To Keep From Cussing—Take A Tip

For more years than I care to recall, I have been involved in “boating” in one form or another. At the age of twelve I was taught to overturn a 16-foot Kennebec canoe deliberately and then right it and get back in. Learning to row with oarlocks and tholepins, sailing a canoe, and then running one of the early crude outboards were successive steps in acquiring boating savvy.

During these forty-odd years of boating I have, alas, committed most of the errors that can be charged to man when he gets in a hurry and doesn't stop to think. Many of the tricks of the trade I have learned the hard way. Therefore, I am inclined to offer some gratuitous advice in the form of tips that may help boaters, whether experienced or neophyte, to avoid trouble.

Yes, after years of boating I've launched from the trailer with the plug out of the boat. So now I check this item before coupling the trailer at home, in case I should overlook it before backing down the ramp.

I've had to be towed in—most embarrassing—because there was no Allen setscrew wrench of the proper size in the tool kit. A small collar on the motor slipped and could not be tightened in place for lack of the wrench. Go over your motor and plan how you would take care of the many things that can go wrong, and have the tools to do them.

If your tool kit in the boat is a metal box, add two or three extra coats of paint, before you use it, to prevent rusting which stains the boat.

Few boaters carry a spare prop. You should. A badly bent or damaged prop may get you safely ashore but its vibration will ruin your motor in the process. You really lose nothing here, as an aluminum prop with normal care will last only two or three years. If your prop is damaged, put on the new one and dress down the old one with a file to balance; then let it serve as the spare. Cone and cotter key must also be carried.

You may avoid a brush with the “law” if you carry a litter box in the boat and persuade your guests to use it.

Paint or stencil your name on fenders, paddles, cushions, skis or any other floating items that may be lost or float away. Most boaters will make an especial effort to return such items if they can find out who owns them.

I won't go into the matter of fire extinguishers or life jackets or the other items required by law to be aboard your boat, but *don't* carry your registration in your wallet. You may not be in the boat when it is checked by the State Patrol or the Coast Guard. Provide a safe and inconspicuous place in the boat for the certificate and keep it there.

It is rough to come in from a pleasure trip after having dropped your car keys overboard. Fasten a door and ignition key in a hidden place under your car hood. You may never need it but, oh boy, it's great if you do.

Make sure that all occupants of your boat are instructed to take a cushion with them in event the boat turns over. It never has, of course, but it can. And by the way, make sure that your boat has adequate flotation. Many do not.

“A place for everything and everything in its place” makes for more pleasant boating, water skiing, fishing, etc. Ladders, skis, belts, and other paraphernalia piled in a jumble in a boat create a dangerous and unpleasant situation. Pull ski ropes and coil them up unless actually in use.

If you use a bridle for pulling a single skier, make sure that you have a plastic float on the ski rope to keep it from being sucked into the prop.

Show everyone who drives your boat how to turn off the key in case of emergency. Even those who are inclined to panic will do this. A boat running wild because throttle or gears have jammed is a water menace of the worst order. These little instructions and drills never hurt anyone and they may prevent tragedy. I recall a few years ago

the shock of seeing a panicky woman run a wild outboard over her husband who had fallen from the boat.

When you acquire a boat trailer, get the spare tire and wheel by all means but, more important, find out if your jack from the towing car can be used to jack up the trailer. In many cases it cannot and a special jack is required.

Carry extra fuses and spare bulb for your navigation lights as well as a spare bulb for the trailer.

Many people start out with a trailer with the minimum rating for the load it is to carry; then, through the years, extra gas tanks and comforts and necessities are added to the boat. Take a look at the trailer axle. Has it acquired a slight bend from overload? This is not to say that your boat should not be comfortably equipped. It does say, “Don't overload the trailer capacity.” Get a heavier trailer. Excessive tire wear is one of the obvious results of an overloaded trailer.

Don't let frozen bearings spoil your fun. Fresh water is hard on bearings, and salt water is even more corrosive. Frequent packing with waterproof grease is the preventive measure here.

When you couple the trailer, check the tail and brake lights. Just because they worked last time doesn't mean they will this time.

Many people sink the trailer deeper than is necessary to load the boat from the water. By trial and error find out where your boat loads best, then keep your tail lights as dry as possible.

Last of all but most important, don't leave your manners, courtesy and good humor on shore. You will irritate your ulcer and spoil your fun if you do. Many boaters, often through ignorance, are inconsiderate of others and do things that are irritating or even dangerous. Don't let them get you “riled up”; this will only make you a dangerous driver. Think a little about these tips and then enjoy your boating to the fullest.

—Al Rachal
Richmond

Financial Facts and Figures

Hunters and shooters pour more than \$1.5 billion a year into the nation's economy

HUNTERS AND SHOOTERS SPEND ON

	In Millions
Licenses, permits and tags	\$ 68.0
Federal excise tax (11%) on sale of guns and ammunition	19.0
Duck Stamps	3.5
Hunters spend developing private land for wildlife	50.0

HUNTERS SPEND ON

Food	100.0
Lodging	30.0
Motor vehicles	272.0
47,800 automobiles worn out—retail cost	\$143 million
300 million gallons of gas burned—retail cost	101 million
4 million quarts of oil used—retail cost	2 million
860,000 tires worn out—retail cost	22 million
Car maintenance for hunting trips	4 million
Bus, air and rail travel	10.0
Boats and water equipment	225.0
Guns and ammunition	209.0
Clothing	268.0
Boots	42.0
Insurance (liability, fire and theft)	7.1
Privilege fees (hunting and shooting)	10.0
Guide fees and other trip expenses	35.0
Dogs	158.0
TOTAL (in Millions)	\$1,506.6

Most of these figures taken from Federal reports.

Courtesy National Shooting Sports Foundation

\$3,000⁰⁰ IN PRIZES FOR YOU

19TH ANNUAL WILDLIFE ESSAY CONTEST

Approved By
THE VIRGINIA STATE BOARD OF EDUCATION
Sponsored By
THE VIRGINIA COMMISSION OF GAME AND INLAND FISHERIES
THE VIRGINIA DIVISION OF THE IZAAK WALTON LEAGUE OF AMERICA

Endorsed By
THE VIRGINIA RESOURCE-USE EDUCATION COMMITTEE
THE RESOURCE-USE EDUCATION COMMITTEE
VIRGINIA ACADEMY OF SCIENCE

SEPT. 13, 1965 - JAN 14, 1966

CONSERVATION:

"HARMONY BETWEEN MEN AND NATURE"

ASK YOUR TEACHER TO
ENTER YOUR SCHOOL NOW

RULES

1. Students from all Virginia schools, grades 5-12 inclusive, are eligible.
2. Essays must be submitted through the schools participating. Notify the Game Commission by returning entry cards mailed to your school principal for conservation materials.
3. Each essay submitted must indicate in the upper right hand corner: County, City, School, School Address, Principal, Grade, Name.
4. High school seniors competing for the scholarship must submit a completed scholarship form, obtainable from contest headquarters, attached to their essays.
5. Essays should not exceed 750 words.
6. Essays will be judged on the basis of originality, effort, grammar, expression and grasp of the subject. Final judging will be made by a panel of judges, representing the Commission of Game and Inland Fisheries, the Virginia Division of the Izaak Walton League of America, and the Virginia State Department of Education.
7. All essays must be sent prepaid or delivered to specified addresses and postmarked not later than January 14, 1966. For specific details see "Instruction Sheet to Teacher" found in the materials packet.
8. School awards will be made for 100 per cent student participation.



PRIZES

- 1 High School Senior Conservation Scholarship \$800.00
 - 8 Grand Prize Awards, \$50.00 each, one to each eligible grade.
 - 8 Second Prizes, \$25.00 each, one to each eligible grade.
 - 24 Third Prizes, \$15.00 each, three to each eligible grade.
 - 24 Honorable Mention Prizes, \$10.00 each, three to each eligible grade.
 - Special Mention Prizes, \$5.00 each, divided among eligible grades in proportion to response.
 - School Awards.
- The Scholarship Winner and the Eight Grand Prize Winners will be offered transportation to Richmond as guests of honor of the sponsors and will have their awards presented to them by the Governor. Others will be given their awards in their schools.